

New Research on the Benefits of Breast Milk

Editorial Staff

Research led by investigators from Johns Hopkins Children's Center suggests breast milk protects girls from severe respiratory infections to a greater degree than boys, challenging previous assumptions that the immune system chemicals present in breast milk exert a universal protective effect. If this were the case, say the investigators, boys and girls would be equally protected from infection.

In a study that tracked 119 premature babies through their first year of life, breast-feeding did not appear to influence the frequency of infections, but rather their severity, including the need for hospitalization. Breast-fed girls were the least likely to be hospitalized with an acute respiratory disease (6 percent of those experiencing an infection), compared to 18 percent of breast-fed boys. Girls who did not receive breast milk were significantly more likely to develop severe infection: Fifty percent of formula-fed girls who suffered an acute respiratory infection required hospitalization, compared to only 18 percent of formula-fed boys.

"In light of these results, we are starting to think that milk does not directly transfer protection against lung infections, but instead switches on a universal protective mechanism, already in the baby, that is for some reason easier to turn on in girls than in boys," said Dr. Fernando Polack, an infectious disease specialist at the center and one of the researchers involved in the study.

The National Institutes of Health funded the study, results of which are published in the June 2008 issue of *Pediatrics*. According to Johns Hopkins, if breast milk triggers a "universal, but variably activated protective mechanism against multiple viruses," researchers must next determine how this mechanism is activated and why it appears to do so more easily in girls than boys.

Source: Johns Hopkins Children's Center. "More Girls Than Boys Benefit From Breast-Feeding. Released June 2, 2008. www.hopkinschildrens.org.

AUGUST 2008